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Book Review

Nothing in Morality Makes Sense Except in the Light of Evolution

A Review of Dennis Krebs, *The Origins of Morality: An Evolutionary Account*. Oxford University Press: New York, USA, 2011, 320 pp., US\$49.95, ISBN 978-0199778232 (hardback).

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Theodosius Dobzhansky (1973) famously opined that nothing in biology makes sense except in the light of evolution. In *The Origins of Morality: An Evolutionary Account*, Dennis Krebs argues that the scientific study of morality is as muddled as biology without an evolutionary framework.

Krebs prefaces the book by noting that he is not writing with you, the 21st century reader, in mind. Instead, he is writing for an audience of one: a white-bearded Charles Darwin, who must familiarize himself with 130 years of theoretical developments since he shared his thoughts on morality in *The Descent of Man and Selection in Relation to Sex* (1874). As such, the book offers an excellent summary of many of the epistemological underpinnings of contemporary evolutionary psychology. And, perhaps as a courtesy to Mr. Darwin, it does so without any of the popular culture references that are ubiquitous across many recent books using an evolutionary perspective to explore human behavior. This might make the book slightly less appealing to an audience expecting witticisms and cartoons, but it also makes it an easy fit as a text for courses in philosophy or psychology.

Although Darwin might not appreciate the names that Krebs drops when describing his first forays into investigating morality from an evolutionary perspective, contemporary readers with a background in evolutionary, moral and developmental psychology surely will. While cutting his teeth in moral psychology as a graduate student studying under Lawrence Kohlberg, Krebs was contacted by Robert Trivers, another young researcher in the biology department at the same university. Trivers, the father of some of the foundations of modern evolutionary theory, shared with Krebs a draft of a paper that would eventually become *The Evolution of Reciprocal Altruism* (Trivers, 1971), which, at the time of this review, has over 5500 citations on Google Scholar. The paper, and a series of questions and comments posed by Trivers in personal conversations and correspondence, led Krebs down a 40-year path of exploring morality using an evolutionary framework.

After clarifying his target audience (Darwin) and detailing his background in studying morality, Krebs raises an important question for a book on morality: *What is*

morality? This is apparently easier posed than answered. Indeed, he provides a poetic line from Harvard philosopher R. B. Perry's opinion on this issue: "There is something which goes on in the world which it is appropriate to give the name 'morality.' Nothing is more familiar; nothing is more obscure in its meaning." After providing definitions from moral philosophers and psychologists William Frankena, Elliot Turiel, Jonathon Haidt, Darwin, and Kohlberg, he provides his own: "a set of ideas about how people who live in groups should behave in order to meet their needs and advance their interests in cooperative ways" (pg. 27). This definition begs some natural questions, such as, "Does morality not apply to people who live in groups?" or, "What interests are people advancing?" Ultimately, it feels as if comments from U.S. Supreme Court Justice Potter Stewart on another topic summarize definitions of morality best: *I know it when I see it*.

Although the definition of morality is, as Krebs quotes from Perry, a bit elusive, there seems to be greater agreement regarding some of the important dimensions underlying it. Krebs proceeds to explore such topics, including deference and respect, self-control, altruism and cooperation, for much of the book. Drawing inspiration from the rhetorical questions he received from Trivers, he suggests that understanding cooperation and altruism in other animals ("primitive" prosocial behaviors, as he calls them) and the theoretical framework that accounts for such behaviors, is essential for a comprehensive understanding of human morality.

In presenting the evolution of morality, Krebs hits on several areas of research that may be of interest to readers interested in other topics as well. He succinctly describes many aspects of the theoretical framework that evolutionary psychologists use to study human behavior, including sexual selection, selfish gene theory, costly signaling theory, parental investment theory, gene-culture coevolution and, generally, the adaptationist approach. In particular, he borrows heavily from arguments made by Geoffrey Miller (2007) on sexual selection for moral virtues, Jonathan Haidt (2001) on the idea that moral judgments are strongly influenced by intuitions rather than rational, deliberate reasoning, and Richerson and Boyd (2005) on the role that gene-culture coevolution may have played in shaping human morality.

Krebs also dedicates space to discussing some common criticisms (and misconceptions) of evolutionary psychology, including claims that evolutionary psychologists spin "just-so stories" and claims that evolutionary perspectives amount to "genetic determinism". This section is strong overall; Krebs handles such claims efficiently, dispassionately and convincingly. Readers familiar with the discipline should follow approvingly, while those who are seeing this material for the first time should find the information easy to digest. The amount of space dedicated to refuting arguments by one specific paper (Lickliter and Honeycutt, 2003) is somewhat strange, though; other papers and books have made more aggressive, more inaccurate and more recent arguments against the theoretical assumptions made by evolutionary psychologists. One gets the sense that this single paper bothered Krebs a great deal, and he has been waiting for years for an outlet such as this book to voice his frustrations (frustrations that Krebs (2003) already voiced in a direct commentary on that paper).

The idea that an evolutionary perspective is useful for understanding phenomena such as altruism, cooperation, reciprocity and dominance hierarchies will not be controversial among readers with a background in evolutionary psychology, and much of the literature reviewed in the book will also be familiar to such readers. The appeal of the

book to this audience may not be in novelty of content, but rather in opening evolutionarily-oriented readers to consider how such topics form the foundations of morality. In contrast, the use of an evolutionary perspective to investigate morality may seem as revolutionary and eye-opening to readers who are not familiar with the perspective as Trivers's suggestions were to Krebs 40 years ago.

Although excellent overall, the book contains some arguments that readers may take issue with. It is structured in a manner that contrasts “primitive” aspects of human cooperation and altruism – and their underlying psychological mechanisms – from “uniquely human” aspects of the same phenomenon. This distinction seems a bit strange given that one of the main points of the book is to suggest that stages of moral development in Kohlberg's cognitive-developmental model – from less mature to more mature – are not best understood in terms stages of maturity, but in terms of the specific functions that such moralizing mechanisms serve. Additionally, given that the book deals with a broad range of topics, researchers specializing in areas touched upon may raise some questions regarding how some constructs are defined. For example, Krebs defines conscience as “a mechanism that induces people to pass judgment on themselves and their behaviors” (pg. 207). As argued recently by Kurzban (2011), a modular approach to psychology, which Krebs endorses, renders such definitions suspect by invoking the existence of a general purpose self that needs to be condemned by itself to motivate itself to engage in adaptive behavior. As another example, disgust researchers may question Krebs's claim that disgust associated toward sexual acts relates to “spiritual purity” – both on the grounds that maintaining spiritual purity does not seem a likely selection pressure to have led to a morally relevant psychological adaptation, and on the question of why sexual behaviors would threaten such purity in the first place – rather than strategic condemnation of individuals threatening one's reproductive interests (Kurzban, Dukes, and Weeden; Weeden, Cohen, and Kenrick, 2008) or avoidance of fitness-reducing sexual acts and partners (Tybur and Gangestad, 2011; Tybur, Lieberman, and Griskevicius, 2009). Such issues do not limit the utility of Krebs' main thesis, and they may inspire researchers to generate and test new hypotheses. Ultimately, I imagine that Darwin would walk away from his conversation with Krebs impressed by the progress that has been made in understanding morality from an evolutionary perspective.

Doug Kenrick (2006) has suggested that the evolutionary perspective has, within psychology, become the theoretical equivalent of the Borg, an alien race from the Star Trek universe that assimilates other species and technologies into their cyborg collective. Here, Krebs lends further support to Kenrick's metaphor by showing that evolutionary perspectives have and will continue to transform the study of morality. Unlike the devastating consequences of triumph from a violent, genocidal alien race, though, this assimilation has the potential to transform the way that people think about, and deal with, a fundamental source of human cooperation and conflict.

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